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23720	7590	09/16/2005	EXAMINER	
WILLIAMS, MORGAN & AMERSON, P.C. 10333 RICHMOND, SUITE 1100 HOUSTON, TX 77042			LANIER, BENJAMIN E	
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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/853,443
Filing Date: May 11, 2001
Appellant(s): GULICK ET AL.

Mark W. Sincell
For Appellant

EXAMINER'S ANSWER

ET

This is in response to the appeal brief filed 28 July 2005 appealing from the Office action mailed 21 March 2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

Claims 1-80 are pending in the application. Claims 1-2, 4, 7-12, 14-17, 20-24, 26, 28-32, 35-36, 38-47, 50-62, 65-66, 68-71, 73, and 75-80 stand fully rejected under 35 U.S.C. 102(e) as being anticipated by Gennaro (U.S. Patent No. 6,317,834). Claims 25 and 72 stand finally rejected under 35 U.S.C. 103(a) as being unpatentable over Gennaro in view of Huang (U.S. Patent No. 5,856,789).

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4, 7-12, 14-17, 20-24, 26, 28-32, 35, 36, 38-47, 50-62, 65, 66, 68-71, 73, 75-80 are rejected under 35 U.S.C. 102(e) as being anticipated by Gennaro, U.S. Patent No. 6,317,834. Referring to claims 1, 2, 4, 8-12, 14, 15, 21-24, 26, 28-32, 36, 39-45, 47, 51-60, 62, 66, 68-71, 73, 75-80, Gennaro discloses a biometric authentication system wherein biometric information in the form of fingerprints, voice pattern, retinal pattern, iris scans, and signatures (Col. 1, lines 35-39) is captured along with personal information unique to each individual (Col. 1, lines 62-67 & Col. 2, lines 32-34), which meets the limitation of receiving biometric data. The biometric data is then encrypted with random data (Col. 2, lines 1-5, 27-31), which meets the limitation of receiving a nonce, and encrypting the biometric data using the nonce and to transmit only encrypted biometric data and the nonce. The encrypted biometric information is then stored

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along with the random data in a biometric database (Col. 2, lines 45-57). The biometric information can also be encrypted using a key generated from password information (Col. 1, line 67 – Col. 2, line 2), which meets the limitation of receiving a secret, and encrypting the biometric data using only the secret. The system is also capable of decrypting the biometric data (Col. 3, lines 4-19), which meets the limitation of the master device decrypting the encrypted biometric data.

Referring to claims 7, 20, Gennaro discloses acquiring a personal identifier (Col. 2, line 9), which would meet the limitation of the secret comprising a GUID.

Referring to claims 16, 17, 35, 38, 46, 50, 61, 65, Gennaro discloses that in order to authenticate a biometric record the user provides the system with a personal identifier, which meets the limitation of a GUID or secret, and a biometric sample that corresponds to the biometric record that is being authenticated (Col. 4, lines 41-56).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 25, 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gennaro, U.S. Patent No. 6,317,834, in view of Huang, U.S. Patent No. 5,856,789. Referring to claims 25, 72, Gennaro discloses a biometric authentication system wherein biometric information in the form of fingerprints, voice pattern, retinal pattern, iris scans, and signatures (Col. 1, lines 35-39) is captured along with personal information unique to each individual (Col. 1, lines 62-67 & Col. 2, lines 32-34), which meets the limitation of receiving biometric data. The biometric data is then encrypted with random data (Col. 2, lines 1-5, 27-31), which meets the limitation of receiving a nonce, and encrypting the biometric data using the nonce and to transmit only encrypted biometric data and the nonce. The encrypted biometric information is then stored along with the random data in a biometric database (Col. 2, lines 45-57). The biometric information can also be encrypted using a key generated from password information (Col. 1, line 67 – Col. 2, line 2), which meets the limitation of receiving a secret, and encrypting the biometric data using only the secret. Gennaro does not disclose that the system utilizes a processor, north bridge, and south bridge. Huang discloses a computer system containing a processor, north bridge, and south bridge (Col. 2, lines 63-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a computer system configuration of Huang in the biometric authentication system of Gennaro because Huang discloses that disclosed computer system configuration is state of the art (Col. 2, line 63).

(10) Response to Argument

Applicant's arguments filed 28 July 2005 have been fully considered but are not persuasive. Applicant argues that Gennaro does not disclose a nonce, which is not persuasive

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because Gennaro discloses that biometric data is encrypted with an encryption key generated from a random combination of answers provided by the individual during a challenge/response session (Col. 2, lines 27-31). After an authentication attempt a new challenge list is randomly generated to create the next encryption key (Col. 3, lines 15-19). This meets Applicant's definition of a nonce because new random challenges are generated each time, and would therefore be a "used a single time". Applicant pointed to page 35, lines 16-21, to define a nonce and the recitation states :

"One use of the monotonic counters 435A and 435B is a source for a nonce. Each nonce must be different. Differences may be predictable or unpredictable. Nonces may be used to help prevent replay attacks. When a message is encrypted, changing even one bit changes the encrypted message. Any strong encryption method distributes even one-bit change extensively. A nonce may be used in a challenge-response method, such as described below."

The above-mentioned recitation of Gennaro meets Applicant's definition because new randomly generated challenges are generated (Col. 3, lines 15-20) and the challenges can be prompting the user for personal information such as a zip code, telephone number, or birth date (Col. 9, lines 7-11). Therefore, Gennaro's challenges are changed even one-bit and used in a challenge response method.

Applicant argues that Gennaro does not disclose authenticating biometric data using a random number is not persuasive because Gennaro using the randomly generated key to decrypt a stored biometric sample and if the decryption is unsuccessful, the individual cannot be verified and his or her authorization status will be declared as "failed", thereby terminating the verification session (Col. 7, lines 31-35). Therefore, Applicant's argument that decryption is not

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the same operation as authentication is not persuasive because in the system of Gennaro, decryption is effectively used for authentication.

Applicant's arguments with respect to the combination of Gennaro in view of Huang are identical to the previous arguments about Applicant's definition of a nonce, and have been fully addressed above.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,


Benjamin E. Lanier




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